

Title (en)

SOLID-STATE IMAGING DEVICE, DRIVING METHOD, AND ELECTRONIC DEVICE

Title (de)

FESTKÖRPER-ABBILDUNGSVORRICHTUNG, ANSTEUERUNGSVERFAHREN UND ELEKTRONISCHE VORRICHTUNG

Title (fr)

DISPOSITIF D'IMAGERIE À SEMI-CONDUCTEURS, PROCÉDÉ DE COMMANDE ET DISPOSITIF ÉLECTRONIQUE

Publication

EP 2963918 B1 20210414 (EN)

Application

EP 14756681 A 20140217

Priority

- JP 2013037868 A 20130227
- JP 2014053597 W 20140217

Abstract (en)

[origin: EP2963918A1] Provided is a solid-state imaging device including: a pixel section configured to include a plurality of pixels arranged in a matrix form, the plurality of pixels performing photoelectric conversion; column signal lines configured to transmit pixel signals output from the pixels in units of columns; an AD converting section configured to include a comparator that compares a reference signal serving as a ramp wave with the pixel signals transmitted via the column signal line and convert a reference level and a signal level of the pixel signals into digital signals independently based on a comparison result of the comparator; a switch configured to be connected with the column signal lines; and a control section configured to turn on the switch only during a certain period of time in a period of time in which the comparator is reset and cause the column signal lines to be short-circuited.

IPC 8 full level

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CPC (source: CN EP US)

H01L 27/14614 (2013.01 - CN EP US); **H01L 27/14621** (2013.01 - CN EP US); **H01L 27/14645** (2013.01 - CN EP US); **H04N 25/44** (2023.01 - CN); **H04N 25/60** (2023.01 - CN EP US); **H04N 25/616** (2023.01 - CN EP US); **H04N 25/701** (2023.01 - US); **H04N 25/75** (2023.01 - CN EP US); **H04N 25/76** (2023.01 - CN); **H04N 25/77** (2023.01 - CN); **H04N 25/772** (2023.01 - CN EP US); **G06V 40/1318** (2022.01 - EP)

Cited by

EP3916624A1; CN110537366A; US11450134B2; US11516417B2; US11765481B2; WO2018190127A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 2963918 A1 20160106; **EP 2963918 A4 20161116**; **EP 2963918 B1 20210414**; CN 104969539 A 20151007; CN 104969539 B 20191022; CN 106878633 A 20170620; CN 106878633 B 20180612; CN 107706202 A 20180216; CN 107706202 B 20190308; CN 110034140 A 20190719; CN 110034140 B 20201027; DE 202014011038 U1 20170703; EP 3389258 A1 20181017; EP 3389258 B1 20221026; JP 6332263 B2 20180530; JP WO2014132822 A1 20170202; KR 101721350 B1 20170329; KR 20150122636 A 20151102; TW 201436571 A 20140916; TW 201832550 A 20180901; TW I634791 B 20180901; TW I694726 B 20200521; US 10070103 B2 20180904; US 2016006969 A1 20160107; US 2017064233 A1 20170302; US 2017223317 A1 20170803; US 2018048872 A1 20180215; US 2018352200 A1 20181206; US 9544519 B2 20170110; US 9661253 B2 20170523; US 9838654 B2 20171205; WO 2014132822 A1 20140904

DOCDB simple family (application)

EP 14756681 A 20140217; CN 201480007095 A 20140217; CN 201710135309 A 20140217; CN 201711072825 A 20140217; CN 201910039149 A 20140217; DE 202014011038 U 20140217; EP 18175261 A 20140217; JP 2014053597 W 20140217; JP 2015502865 A 20140217; KR 20157020333 A 20140217; TW 103102362 A 20140122; TW 107118304 A 20140122; US 201414768534 A 20140217; US 201615352207 A 20161115; US 201715489223 A 20170417; US 201715792065 A 20171024; US 201816041128 A 20180720